

Comments to Dkt
by 8-12.

DRAFT

~~WATKINS~~
MEMORANDUM

FROM B. H. Fujikawa TO C. L. DeVore DATE August 8, 1991
SUBJECT Summary of Boiler Burner Meeting on 8-8-91

Attendees:	Chuck DeVore	Gale Chapman
	Jim Allen	Dennis Killian
	Larry Jones	Gerald Hintze
	Byron Fujikawa	Jim Nelson
	Irwin Stein	Aaron Nissen
	Ron Nelson	Joe Hamblin
	Doug Fowler	Joe Duwel
	Raffi Krikorian	Bruce Blowey
		(part time)

Plans:

1. MES will continue in direction of having 48 burners and stabilizers installed on Unit 1 during the spring outage beginning on April 13, 1991.
2. IPSC will arrange with a meeting with RJM in four weeks to answer questions from LADWP and IPSC.
3. IPSC will ask RJM to do a finite element analysis on the present burners and operating conditions to see if their prediction indicates that the burners would have failed like they have. This is being done since there is some doubt by Raffi as to the validity of the results from this kind of analysis. This run would validate the method with actual results.
4. IPSC will arrange for obtaining and installing stabilizers and shrouding for 48 burners on Unit 2 during the 4-week fall outage beginning on October 28, 1991. They will also arrange for air balancing. This is to see if the stabilizers will work as claimed by RJM.
5. (If validated) IPSC will arrange for obtaining and installing stabilizers and shrouding for 48 burners on Unit 1 during the 4-week spring outage beginning on April 13, 1991. This will be in conjunction with the installation of the modified burners being arranged for by MES.
6. Need to address what other tasks need doing during or after the above tasks. Need to lay out a schedule or alternative schedules to do all tasks. Need to verify that everyone can meet the windows in the schedule. Need cost estimates.

DRAFT

Highlights of Meeting

1. RJM given B&W modified burner design information.
2. On the present schedule, we can probably install 48 burners in the spring on Unit 1, but without the desired well thought out technical approach.
3. There are two problems associated with air. Out of service burners are not getting enough cooling air. In service burners do not have a stable flame. This may be an air flow distribution problem.
4. Can we continue for a couple of years and maintain the IGS Units until we can get a good fix? IPSC (Gale) says no for Unit 1, but yes for Unit 2.
5. RJM is seen to have a lot of experience for oil and gas burners, but is new to coal burners. There is a different swirl factor for oil, gas, and oil. Oil and gas burner units have there highest efficiency around a swirl factor of 0.6.
6. IPSC handed out their version of a schedule for handling the burner modification. MES met with GEMS earlier and presented their version. MES version copies were faxed to IPSC prior to this meeting.
7. IPSC is concerned with safety on Unit 1. They want replacement burners in the spring of 1992 no matter what we want to do in the way of R&D. According to IPSC all 48 burners on Unit 1 need to be replaced. There are holes in various parts due to high temperature. See pictures and outage book for Units 1 and 2.
8. IPSC wants to replace all 48 burners on Unit 1 during the spring outage on Unit 1. Add stabilizers also, if they prove out on Unit 2. Worst case would be to shutdown and pull the stabilizers. (Gale can live with this)
9. Put stabilizers on Unit 2 during the fall, 1991 outage. Balance air, use SS 310 material for stabilizers, and put on shrouds.
10. Need to have RJM answer some questions. A meeting was mentioned. Ron Nelson said he would like to attend.
11. For the burner material only, the cost is about \$1.2 million for 310 SS and \$1.8 million for 800H.

DRAFT

12. Could the finite element analysis method have predicted that the presently designed burners would have failed?
13. Do burner and stabilizer. Design, fabricate, and install on Unit 1 in the spring of 1992.
14. Raffi would like to try 1 burner with new material and design in November on Unit 2.
15. Raffi says B&W has not committed to 48 burners for spring, 1992.
16. Some of the costs: \$350k to RJM
For the stabilizers: \$90k.
For the 3 D modelling: \$80k.
For the air flow balancing: \$45-50k.

BHF

A4 -> A4

IP7_003621